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cni
Coalition for Networked Information

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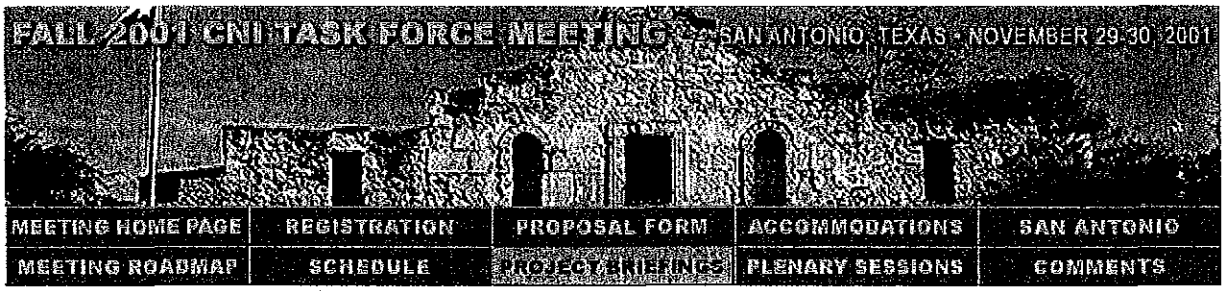

Fall 2001 Task Force Meeting
Project Briefings Schedule

Friday, November 30, 2001
9:00 - 10:00 AM

Salon del Rey Central

Computer and Network Security On Campus: New Visibility for an Old Problem

Daniel Updegrove
Vice President for Information Technology
University of Texas, Austin

Steve Worona
Director of Policy and Networking Programs
EDUCAUSE

Even before the events of September 11, fingers were increasingly pointing at campus-based computers and networks as a disproportionate source of Internet abuse. Since September 11, computer security has figured heavily in anti-terrorism legislation, and new requirements from Federal funding agencies aim directly at securing computers bought and operated under research grants. We can expect society's interest in how we run our campus networks only to expand.

In July, 2000 EDUCAUSE formed a System Security Task

Force to help colleges and universities focus on their computer security problems by identifying a variety of approaches which, while not perfect solutions, nonetheless provide cost-effective improvement. This session will report on the current activities and plans of the Task Force, and will highlight our biggest problems and most promising solutions.

Salon del Rey North

Connexions: Education for a Networked World

Ross Reedstrom
Executive Director, Gulf Coast Consortium for Bioinformatics
Rice University

The Connexions Project is a new approach to authoring, organizing, and delivering educational materials that fully exploits modern information technology. In contrast to the traditional process of textbook writing and publishing, Connexions fosters communities of authors, instructors, and students, who together fashion continually updated "modules" from which courses are constructed. Preliminary trials with Rice University faculty and students over the past year have been so successful that our electrical and computer engineering department has resolved to implement a holistic new Connexions-based curriculum. The ideas and philosophy embodied by Connexions have the potential to change the very nature of textbook writing and publishing, producing a dynamic, interconnected educational environment that is pedagogically sound, both time and cost efficient, and fun.

Connexions exploits the flexible information organization and rapid communication capabilities of the Internet, World Wide Web, and XML. The Connexions environment rests on the unique combination of four fundamental concepts:

- Modules of information that are topic or "concept" based and encoded in XML, with MathML used for mathematics content.
- Web-based navigational aids to explore the "connexions" between topics.

- Course Composition tools for instructors to weave modules together into customized textbooks.
- Collaborative development of modules by a large community of authors.

The result is a coherent system for course development, organization, and delivery that mutually benefits students, instructors, and authors.

handout (in PDF format) 48K file size 

Salon del Rey South

Broadband Connectivity in Wireless Country - The Gates Foundation and OnSat Communications Network Native American Access to Technology Project

Richard Akeroyd
Executive Director,
Libraries & Public Access to Information Program
Bill & Melinda Gates Foundation

Dave Stephens
Chairman
OnSat Network Communications, Inc.

Chris Jowaisas
Manager, Network Deployment
Bill & Melinda Gates Foundation

Robert A. Freling
Executive Director
Solar Electric Light Fund

The Bill & Melinda Gates Foundation has partnered with OnSat Network Communications to provide an innovative, cost-effective combination of satellite and local loop wireless solution for connectivity for Native American tribes in the Four Corners area. Many of the 165 sites receiving public access computers through the grant program had no access to basic wire service, and in some cases no power was available. The current program is providing high-speed connections through satellite to each of these sites, using solar power donated by the Solar Electric Light Fund for off- grid locations. The briefing will include a description of the Native American grant program and technical details of the satellite and wireless solution. Also included will be a discussion of issues and solutions related to the technology, social context, and long-term sustainability of the project.

handout (in PDF format) 30K file size 

La Corona

The National Gallery of the Spoken Word

Mark Kornbluh
Executive DirectorH-Net: Humanities & Social Sciences OnLine
Michigan State University

Jerry Goldman
Professor
Northwestern University

Funded under DLI2 as collaborative research project to explore the full range of issues involved in making spoken word resources available and useful over the web, the NGSW has made substantial progress on a number of fronts. This project briefing will discuss our implementation of OAIS and adaptation of METS in designing a large-scale interoperable open-source multimedia digital archive. We will also provide an update on strategies for searching audio resources and demonstrate both tools for linking audio to text and interfaces for effective delivery of aural resources.

handout (in PDF format) 8K file size 

La Reina

The ARL E-Metrics Study: Statistics Manual and Project Update

Charles R. McClure
Francis Eppes Professor & Director
Florida State University

Rush Miller
University Librarian and Director
University of Pittsburgh

This presentation will introduce the recently released manual of statistics and measures describing network use, users, and services. The manual was developed by a study team at Florida State University, Information Institute for the Association of Research Libraries E-metrics project. The session will also discuss key issues and preliminary findings regarding work currently in progress

related to models for describing the academic library's role in contributing to institutional outcomes. The session will conclude with a discussion of the final activities in this project and possible next steps.

handout (in PDF format) 12K file size

handout (in PPT format) 264K file size

La Duquesa

National Digital Information Infrastructure & Preservation Program

Cliff Cohen
Director for Operations, Library Services
Library of Congress

In December 2000 Congress directed the Library of Congress, working jointly with the Department of Commerce, NARA and the White House Office of Science and Technology Policy, in cooperation with a number of other entities such as CLIR, NLM, NAL, OCLC, and RLG, to develop a National Digital Information Infrastructure and Preservation Program. This briefing will bring the audience up to date on progress in creation of this national program.

La Princesa

Building an Integrated Agent-Oriented Catalog

Kristin Antelman
Head of Systems and Networking, Health Sciences Library
University of Arizona

Nathan Denny
Applications Systems Analyst, Senior, Health Sciences Library
University of Arizona

With the addition of digital resources, libraries are faced with the significant challenge of providing users with a comprehensive catalog of their collections. Integrated library systems can be a clumsy tool for managing both

electronic and traditional resources, leading many libraries to maintain separate databases to support web interfaces to electronic resources. This program describes a project at the University of Arizona Health Sciences Library to create a virtually integrated catalog implemented as a multi-agent system. The integrated catalog simultaneously searches the online catalog (via Z39.50) and the electronic resources database (in XML/RDF), delivering a properly collated and customizable result set to the user. The electronic resources database is structured on the IFLA-recommended work/expression/manifestation data model and uses Dublin Core plus locally defined descriptive and administrative metadata elements. The agent model system is comprised of four components: user interface, expert, data source, and profile agents. The agents communicate with each other using http-transmitted messages. The model provides an open framework to create a single virtual catalog from distributed data sources.

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Last updated Wednesday, July 3, 2002.

Broadband Connectivity in Wireless Country - The Gates Foundation and OnSat Communications Network Native American Access to Technology Project

Two years ago, the Bill & Melinda Gates Foundation started a grant program specifically designed to meet the information needs of Native Americans living in New Mexico, Arizona, Colorado and Utah. Three goals were established for the program:

- Empower Native communities by providing access to digital information resources and the Internet
- Increase usage of tools and technology for creating and preserving local culture and language
- Increase opportunity for digital skill acquisition

To achieve these goals, the program was structured into two phases- the first focused on getting computers and connectivity to the local communities within the grant region, the second on providing second level training facilities and hosting services for community use in centrally accessible areas. A breakdown of the program for each of these phases is as follow:

Phase One (2000-2001)
Basic Access to Technology Grants

- 2-4 public access workstations
- Peripherals – digital camera, scanner, microphone, printers
- Internet connectivity
- On-site training
- Technical support

Phase Two (2002)
Content Creation and Storage Grants

- Server for archiving / web-hosting

Community Lab and Trainer Internship Grants

- Training lab

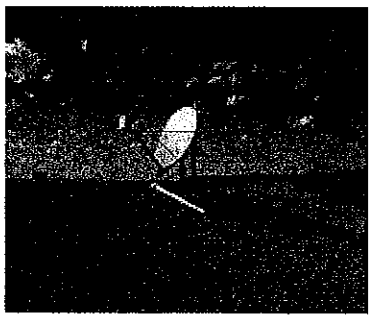
Tribal Support Organizations Grants

One of the biggest challenges in the initial stages of the program was the lack of infrastructure available to the Native American community in the Four Corners area. For example:

- 22% of Navajo households have telephones
    - 47% of Native households on reservations have telephones
    - 94% of American households have telephones
- 15% of Native household have computers
- 10% of Native households have access to the Internet

After initial efforts to work with local telecommunication providers to come up with solutions for remote sites failed, the Foundation partnered with OnSat

Network Communications to provide an innovative, cost-effective combination of satellite and local loop wireless as a solution. The current program is providing high-speed connections through satellite to each of the 165 sites covered under the program, using solar power donated by the Solar Electric Light Fund for off-grid locations.



Internet connectivity is now available at local speeds of up to 256k down and 64k up at each of the sites, through a shared 4Mb down, 192k up dedicated service. The satellite dish and router are installed by OnSat, and connected to public access computers provided through the Foundation grant in each of the 165 sites. Training is also provided to the local residents at each of the sites by the Foundation, both for basic computer operations and for use of the Internet.

As a follow-on to the Foundation project, OnSat is working with the Navajo Nation to provide wireless local loop extensions using 2.4 Ghz, 802.11B wireless cards from the original site to network in additional computers at some sites.

One of the keys to making this program work was the development of a payment structure that would allow the local sites to continue service following termination of the grant, using their own resources. OnSat, working with the Foundation, was able to come up with an innovative pay-as-you-go approach, which allows each site to decide how much access they can afford at any given time, and pay directly for that through a web-based transaction service. A flat monthly fee of $100 was established for full time connectivity for up to 10 concurrent users, but if a site needs or wants a less than full time connection, they are able to do so at $0.05 per minute with no minimum usage. Even if a site is disconnected for some time, they are still able to access a shared cache of web pages recently visited by other sites, enabling a minimal level of service without any cost whatsoever.

Throughout the entire process, representatives of the tribes were closely involved in making the decisions associated with this project, and have been included in the installation and troubleshooting process to make sure that the technical infrastructure will have local support when the grant period ends.

Additional information on the Native American Access to Technology Program of the Foundation can be found in a recent article from Computers in Libraries at http://www.infotoday.com/cilmag/oct01/dorr&akeroyd.htm. A description of the OnSat Network Communications solution can be found at http://www.onsatnet.com/html/libraries/libraries.html. Projects funded by the Solar Electric Light Fund can be seen at http://www.self.org/projects.asp.